From:

Chernyshev, Olga

Sent:

Thursday, November 18, 2004 8:58 AM

To:

STIC-Biotech/ChemLib

Subject:

09/899,815, sequence search request

Please search SEQ ID NO: 1 in regular and pending databases.

Thank you very much!

Olga N. Chernyshev, Ph.D. AŬ 1646 4D84 2-0870 mail 4C70

STAFF USE ONLY

Searcher:_

Searcher Phone: 2-

Date Searcher Picked up

Date Completed:_ Searcher Prep/Rev. Time

Online Time:

Type of Search

NA Sequence: #_

AA Sequence :#

Structure: #

Bibliographic:

Litigation:_

Patent Family:

Other:_

Vendors and cost where applicable

STN:

SEQUENCE SYSTEM:

WWW/Internet:_ Other(Specify):_

DIALOG: QUESTEL/ORBIT: LEXIS/NEXIS:

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RESULT 1 PNO512 beta-amyloid protein - guinea pig (fragment) C;Species: Cavia porcellus (guinea pig) C;Date: 31-Dec-1993 #sequence_revision 31-Dec-199 C;Accession: PN0512 R;Shimohigashi, Y.; Matsumoto, H.; Takano, Y.; Sa Biochem. Biophys. Res. Commun. 193, 624-630, 1993 A;Title: Receptor-mediated specific biological ac A;Reference number: PN0512; MUID:93290653; PMID:7 A;Accession: PN0512 A;Cross-references: UNIPROT:07M088 C;Superfamily: Alzheimer's disease amyloid beta p C;Keywords: alternative splicing; amyloid		30 31 31 31 32 33 33 33 33 33 33 33 33 33							
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Best Local Similarity Matches 41: Conserv 41; 1 DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42 DAEERHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42 Conservative 96.3%; Score 210; DB 2; 97.6%; Pred. No. 1.9e-20; 0; Mismatches Length 42; Indels 0; Gaps 0

's disease amyloid beta/A4 protein precursor - dog (fragment): Canis lupus familiaris (dog)
1-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 28-Jul-1995
nn: A60045
nne, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P.
Mol. Brain Res. 10, 299-305, 1991
Conservation of the sequence of the Alzheimer's disease amyloid peptide in ce number: A60045; MUID:92017079; PMID:1656157

n: A60045 type: mRNA 1-57 <JOH>

gob

sferences: EMBL:X56125
nily: Alzheimer's disease amyloid beta protein; animal
s; alternative splicing; Alzheimer's disease; amyloid; Similarity 96.3%; 97.6%;

Kunitz-type proteinase brain

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1 DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42 6 DAEFRHDSGYEVHHOKLVFFAEDVGSNKGAIIGLMVGGVVIA 47 Conservative 0 Score 210; DB 2; Length 57; Pred. No. 2.6e-20; O; Mismatches 1; Indels 0; Gaps

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K;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P. Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease amyloid A;Reference number: A60045; MUID:92017079; PMID:1656157
A;Molecule type: mpun
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C;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 13-Aug-1: C;Datesion: F60045
C;Accession: F60045
R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P. Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease amyloid A;Reference number: A60045; MUID:92017079; PMID:1656157
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, MOLECULE type: mRNA
, Residues: 1-57 <JOH>
, Cross-references: EMBL:X56124

, Superfamily: Alzheimer's disease amyloid beta protein; animal
J, Superfamily: Alzheimer's disease; amyloid;
                                                                                         Cross-references: EMBL:X56130
;Superfamily: Alzheimer's disease
;Keywords: alternative splicing; I
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;Species: Sus scrofa domestica (domestic pig)
;Date: 01_Dec__1992 #sequence_revision 01-Dec-1992 #text_change
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;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 28-Jul-1995;Accession: E60045
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;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type
;Keywords: alternative splicing; Alzheimer's disease; amyloid; brain
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R;Davidson, J.S.; West, R.L.; Kotikalapudi, P.; Maroun, Biochem. Biophys. Res. Commun. 188, 905-911, 1992
A;Title: Sequence and methylation in the beta/A4 region A;Reference number: PQ0438; MUID:93075180; PMID:1445331
A;Accession: PQ0438
                                                                                                                                                                                         Alzheimer's disease amyloid A4 protein precursor-
c;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 30-Sep-1993 #sequence_revision 19-Oct-1995
C;Accession: PQ0438; C60045
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A;Cross-references: GB:M83558; R;Johnstone, E.M.; Chaney, M.O. Brain Res. Mol. Brain Res. 10,
                                                     A; Molecule type: DNA
A; Residues: 1-82 < DAV>
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C;Accession: G60045
R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Littl Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease A;Reference number: A60045; MUID:92017079; PMID:1656157
A;Accession: G60045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: EMBL:X56126
C;Superfamily: Alzheimer's disease amyloid beta protein; animal
C;Keywords: alternative splicing; Alzheimer's disease; amyloid;
                                                                                                                                                                                                                                                                                                         A;Cross-references: UNIPROT:Q29149; EMBL:X56128; NID:g2165; PIDN:CAA39593.1; C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type KC;Keywords: alternative splicing; Alzheimer's disease; amyloid; brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Littl Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease A;Reference number: A60045; MUID:92017079; PMID:1656157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Species: Ursus maritimus (polar bear)
C;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992
C;Accession: B60045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C;Species: Cavia porcellus (guinea pig)
C;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 disease amyloid beta/A4 protein precursor -
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                                                                                                                                                                  DAEFRHDSGYEVHHOKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
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                                                                                                                     DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 47
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                                                                                                                                                                                                                 Score 210; DB
Pred. No. 2.6e
0; Mismatches
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0; Mismatches
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Pred. No. 2.6e-20;
                                                                                                                                                                                                                                        DB 2;
.6e-20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #text_change 09-Jul-2004
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  rabbit
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(fragment)
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gob

#text_change 19-Oct-1995

of the

rabbit amyloid precursor

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Little,

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N;Alternate names: Alzheimer's disease amyloid beta protein precursor [validated] - human N;Contains: amyloid beta protein long, plaque form; amyloid beta protein short, vasculat protein precursor splice form APP(770) C;Species: Homo sapiens (man)
A; Molecule type: DNA
A; Residues: 1-14, 'W', 17-288, 'V', 365-770 < LEM2 >
A; Cross-references: EMBL: X13466; NID: 935598; PIDN: CAA31830.1;
A; Note: alternative splice form APP(695)
A; Lahiri, D.K.; Salton, S.R.J.; Robakis, N.K.
                                                                                                                                                                                                                                                                                                                                         A;Molecule type: DNA
A;Residues: 1-288,'V',365-770 <LEM1>
A;Cross-references: EMBL:X13466
A;Note: alternative splice form APP(695)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic Acids Res. 17, 517-522, 1989
A;Title: The PreA4(695) precursor protein of Alzheimer's A;Reference number S02260; MUID:89128427; PMID:2783775
A;Accession: S02260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Species: Homo sapiens (man)
C;Date: 30-Jun-1987 #sequence revision 28-Jul-1995 #text_change 15-Sep-2000
C;Date: 30-Jun-1987 #sequence revision 28-Jul-1995 #text_change 15-Sep-2000
C;Accession: S02280; S05194; A32277; A33260; A35486; I39452; I39451; I39453; I59562; A44
668; A28583; A29302; A60805; JL0038; S06121; A60355; A59011; A38384; S29076; S38252; S3
4668; A28583; A29302; A60805; JL0038; S06121; A60355; A59011; A38384; S29076; S38252; S3
4668; A28583; A29302; A60805; JL0038; S06121; A60355; A59011; A38384; S29076; S38252; S3
4668; A28583; A29302; A60805; JL0038; S06121; A60355; A59011; A38384; S29076; S38252; S3
4668; A28583; A29302; A60805; JL0038; S06121; A60355; A59011; A38384; S29076; S38252; S3
4668; A28583; A29302; A60805; JL0038; S06121; A60355; A59011; A38384; S29076; S38252; S3
4668; A28583; A29302; A60805; JL0038; S06121; A60355; A59011; A38384; S29076; S38252; S3
4668; A28583; A29302; A60805; JL0038; S06121; A60355; A59011; A38384; S29076; S38252; S3
4668; A28583; A29302; A60805; JL0038; S06121; A60355; A59011; A38384; S29076; S38252; S3
4668; A28583; A29302; A60805; JL0038; S06121; A60355; A59011; A38384; S29076; S38252; S3
4668; A28583; A29302; A60805; JL0038; S06121; A60355; A59011; A38384; S29076; S38252; S3
4668; A28583; A29302; A60805; JL0038; S06121; A60355; A59011; A38384; S29076; S38252; S3
4668; A28583; A29302; A60805; JL0038; S06121; A60355; A59011; A38384; S29076; S38252; S38252
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C;Superfamily: Alzheimer's disease
C;Keywords: alternative splicing; I
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A; Residues: 12-68 < JOH>
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Alzheimer's
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                                                                                                                                                                                                                                                                  R_f Lemaire, H.G. submitted to the EMBL Data Library, November
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In. J. Pathol. 138, 1423-1435, 1991

In. Title: Homology of the amyloid beta protein precursor preference number: A49795; MUID:91273117; PMID:1905108

In Accession: A49795
                                                                                                                                                                                                Reference number: S05194
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Species: Macaca fascicularis (crab-eating macaque);
Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1
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Pred. No. 4e-19;
0; Mismatches
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Pred. No. 3.9e-20;
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Down's syndrome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Status: translated from GB/EMBL/DDBJ A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R;Levy, E.; Carman, M.D.; Fernandez-Madrid
Science 248, 1124-1126, 1990
A;Title: Mutation of the Alzheimer's disea:
A;Reference number: 139453; MUID:90260663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: DNA
A; Residues: 1-770 < YOS1>
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A;Residues: 1-75 <LAF>
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Biochem. Biophys. Res. Commun. 159, 297-304, 1989
A;Title: Characterization of the 5'-end region and the first
A;Reference number: A32277; MUID:89165870; PMID:2538123
                                      two
                                          exons
                                          of the beta-prot
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PID:g516074 Little, S.P.

Cross-references: GB:M24546; GB:M24547; NID:g341202; PIDN:AAC13654.1; JOhnstone, E.M.; Chaney, M.O.; Moore, R.E.; Ward, K.E.; Norris, F.H.; iochem. Biophys. Res. Commun. 163, 1248-1255, 1989; Title: Alzheimer's disease amyloid peptide is encoded by two exons and and shows similari

Reference number: A33260; MUID:89392030; PMID:2675837

A;Cross-references: GB:M29270; NID:g178863; PIDN:AAA51768.1; PID:g178865 R;Prelli, F.; Levy, E.; van Duinen, S.G.; Bots, G.T.A.M.; Luyendijk, W.; Biochem. Biophys. Res. Commun. 170, 301-307, 1307gene Frangione, in amyloid **w** Of

A;Molecule type: DNA
A;Residues: 672-710 <PRE1>
A;Residues: 672-710 <PRE1>
A;Residues: 672-710 <PRE1>
A;Residues: 672-710 <PRE1>
A;Rote: 693-Gln was found in DNA isolated from HCHWA-D patients
R;YOshikai, S.I.; Sasaki, H.; Doh-ura, K.; Furuya, H.; Sakaki, Y.
Gene 87, 257-263, 1990
A;Title: Genomic organization of the human amyloid beta-protein precursor
A;Reference number: 139451; MUID:90236318; PMID:2110105
A;Accession: 139452

gene

GB/EM

A;Cross-references: GB:M33112; NID:g178613; PIDN:AAB59502.1; PID:g178616 A;Accession: I39451 acid sequence not shown; translation not shown; translated from GB/EM

A; Molecule type: DNA
A; Residues: 1-530, 'QWLMPVIPAFWEAKVGR' <YOS2>
A; Cross-references: GB: M34875; NID: 9178608; PIDN: AAB59501.1;
A; Cross-references: GB: M34875; NID: 9178608; PIDN: AAB59501.1; PID:g178615 i. Y.

Gene 102, 291-292, 1991 A;Reference number: A59020; MUID:91340168; PMID:1908403 S.I.; Sasaki, H.; Doh-ura, K.; Furuya, Η., Sakaki,

A;Contents: annotation; erratum
A;Note: revised physical map for reference I39451
R;Levy, E.; Carman, M.D.; Fernandez-Madrid, I.J.; Power, M.D.; Lieberburg, I.; van Duin

disease amyloid gene 60663; PMID:2111584 ij hereditary cerebral

PID:9178620

A;Title: A mutation in the amyloid precursor protein associated A;Reference number: 159562; MUID:92022553; PMID:1925564 A;Accession: 159562 with

hereditary

Alzheim

A; Molecule type: DNA
A; Residues: 689-716, 'F', 718-737 MUR> ;Status: translated from GB/EMBL/DDBJ

A;Cross-references: GB:S57665; NID:g236720; PIDN:AAB19991.1; PID:g236721
R;Kamino, K.; Orr, H.T.; Payami, H.; Wijsman, E.M.; Alonso, M.E.; Pulst, S.M.; arakis, S.E.; Korenberg, J.R.; Sharma, V.; Kukull, W.; Larson, E.; Heston, L.L. Am. J. Hum. Genet. 51, 998-1014, 1992
Am. J. Hum. Genet. 51, 998-1014, 1992
A;Title: Linkage and mutational analysis of familial Alzheimer disease kindreds A;Reference number: A44017; MUID:93035397; PMID:1415269
A;Accession: A44017 disease kindreds for the

A; Residues: 687-692, 'G', 694-718 < KAM1>
A; Cross-references: GB:S45135; NIDS257377; PIDN:AAB23645.1; A; Experimental source: familial Alzheimer disease family SB A; Experimental source: familial Alzheimer (NCBIP:115374) PID:g257378

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A; Cross-references: GB:Y00264; NID:g28525; PIDN:CAA68374.1; PID:g28526
A; Note: alternative splice form ApP(695)
R; Robakis, N.K.; Ramakrishna, N.; Wolfe, G.; Wisniewski, H.M.
Proc. Natl. Acad. Sci. U.S.A. 84, 4190-4194, 1987
A; Title: Molecular cloning and characterization of a cDNA encoding the cerebrovascular A; Reference number: A29030; MUID:87231971; PMID:3035574
A; Accession: A29030
A; Molecular ****
A;Molecule type: mRNA
A;Residues: 1-344,'I',365-770 <PO2>
A;Cross-references: GB:X06989; EMBL:Y00297; NID:g28720;
A;Note: alternative splice form APP(751)
R;Kitaguchi, N.; Takahashi, Y.; Tokushima, Y.; Shiojiri,
Nature 331, 530-532, 1988
A;Title: Novel precursor of Alzheimer's disease amyloid p;Accession: A38949; MUID:88122641; PMID:2893291
A;Accession: A38949
A;Molecule type: mRNA
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A; Residues: 286-344, 1', 365-366 <TAN2>
A; Residues: 286-344, 1', 365-366 <TAN2>
A; Cross-references: EMBL: X06982; NID: 928817; PIDN: CAA30042.1;
A; Experimental source: promyelocytic leukemia cell line HL60
A; Mote: alternative splice form APP (751)
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A; Residues: 284-288, 'V, 365-646, 'E', 648-770 < ROB>
A; Residues: 284-288, 'W, 365-646, 'ID: 9178539; PIDN: AAA51722.1;
A; Cross-references: GB: M16765; NID: 9178539; PIDN: AAA51722.1;
A; Note: the authors translated the codon GAG for residue 647
R; Goldgaber, D.; Lerman, M.I.; McBride, O.W.; Saffiotti, U.;
Science 235, 877-880, 1987
Science 235, 877-880, 1987
A; Title: Characterization and chromosomal localization of a call of the company of the call of the company of th
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A;Title: A new A4 amyloid mRNA contains a domain homologous to A;Reference number: S00925; MUID:88122639; PMID:2893289
A;Accession: S00925
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A;Residues: 674-703 <TAN1>
A;Residues: 674-703 <TAN1>
A;Cross-references: GB:M15532; NID:g177957; PIDN:AAA51564.1; PID:g177958
R;Dyrke, T.; Weidemann, A.; Multhaup, G.; Salbaum, J.M.; Lemaire, H.G.; 1
EMBO J. 7, 949-957, 1988
A;Title: Identification, transmembrane orientation and biogenesis of the
A;Reference number: S02638; MUID:88296437; PMID:2900137
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R;Tanzi, R.E.; Gusella, J.F.; Watkins, P.C.
Science 235, 880-884, 1987
A;Title: Amyloid beta protein gene: cDNA, TA;Reference number: A47585; MUID:87120329;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Title: Protease inhibitor domain encoded A; Reference number: S00707; MUID:88122640; A; Accession: S00707
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Nature 331, 528-530, 1988
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A; Residues: 672-678 < DYR>
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A;Residues: 674-756,'S',758-770 <GOL>
A;Cross-reterences: GB:M15533; NID:g178706;
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Nature 325, 733-736, 1987
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PMID:2893290
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A;Cross-references: GB:M18734; NID:g178572; PIDN:AAA51726.1; PID:g178573
A;Note: the authors translated the codon GAA for residue 599 as Gly, ACC for residue
8 as Val, GTG for residue 609 as Asn, AAT for residue 610 as Gly, and GGT for residue
A;Note: the cited Genbank accession number, J03594, is not in release 101.0
R;Masters, C.L.; Multhaup, G.; Simms, G.; Pottgiesser, J.; Martins, R.N.; Beyreuther,
                                                                                                                                                                                                                                                                                                                                                                                                       A;Residues: 606-770 <VIT3>
R;Zain, S.B.; Salim, M.; Chou, W.G.; Sajdel-Sulkowska, E.M.; Majocha, R.E.; Marotta, Proc. Natl. Acad. Sci. U.S.A. 85, 929-933, 1988
Proc. Natl. Acad. Sci. U.S.A. 85, 929-933, 1988
A;Title: Molecular cloning of amyloid cDNA derived from mRNA of the Alzheimer disease A;Reference number: A31087; MUID:88124954; PMID:2893379
A;Accession: A31087
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A;Accession: A30320
A;Status: not compared with conceptual translation
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R; Vitek, M.P.; Rasool, C.G.; de Sauvage, F.; Vitek, S.M.;
Brain Res. Mol. Brain Res. 4, 121-131, 1988
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A; Residues: 507-770 <ZAI>
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A; Residues: 284-288, 'V', 365-770
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: GB:X06981; NID:g28816; PIDN:CAA30041.1; PID:g929611
A;Experimental source: glioblastoma cell line
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Status: not compared with
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A;Residues: 122-288,'V',365-770 <VIT2>
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                                                                                                                                     Query Match
Best Local :
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  672
                                                   1 DAEFRHDSGYEVHHOKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
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DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 713
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97.6%;
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                                                                                                                                  Score 210; DB 1;
Pred. No. 4.5e-19;
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R;Yamada, 1.; Course, 149, 655-671, 179 Blochem. Blophys. Res. Commun. 149, 655-671, 179 A;Title: Complementary DNA for the mouse homolog of the A;Title: Complementary DNA for the mouse homolog of the A;Title: Complementary DNA for the mouse homolog of the R;de Strooper, B.; van Leuven, F.; van den Berghe, H. Biochim. Biophys. Acta 1129, 141-143, 1991
A;Title: The amyloid beta protein procursor or proteinase A;Reference number: S19727; MUID:92096458; PMID:1756177
A;Recession: S19727 R;Izumi, R.; Yamada, T.; Yoshikai, S.; Sasaki, H.; Gene 112, 189-195, 1992 A;Title: Positive and negative regulatory elements A;Reference number: I49485; MUID:92209998; PMID:155 C;Species: Mus musculus (house mouse)
C;Date: 31-Mar-1989 #sequence_revisio
C;Accession: A27485; S19727; T49485 A;Cross-references: EMBL:X59379 R;Izumi, R.; Yamada, T.; Yoshikai, S.; Sasaki, H.; Hattori, A; Molecule type: mRNA A; Residues: 1-210,'G',212-220,'S',222-396,'A',398-402,'T',404-448,'A',450-695 A;Cross-references: UNIPROT:P12023; GB:M18373; NID:g191568; A;Experimental source: brain A; Molecule type: mRNA A; Residues: 1-695 < YAM> R;Yamada, T.; Sasaki, H.; Furuya, H.; Miyata, Biochem. Biophys. Res. Commun. 149, 665-671, N; Alternate names: proteinase nexin Alzheimer's disease amyloid beta/A4 protein homolog precursor -N;Alternate names: proteinase nexin II revision 31-Mar-1989 #text_change 09-Jul-2004 for the human amyloid beta I.; Sakaki, nexin expression Σ : PIDN: AAA37139.1; H mouse from e E mouse the protein Alzheimer' B10:930908 18

closer

A; Accession: 149485

from

GB/EMBL/DDBJ

PMID:1555768

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A; Molecule type: protein
A; Residues: 18-37, 'X', 39-40, 'X', 42-44 < SCH>
A; Residues: 18-37, 'X', 39-40, 'X', 42-44 < SCH>
A; Note: evidence for heparan sulfate attachment
R; Hesse, L.; Beher, D.; Masters, C.L.; Multhaup, G.
FEBS Lett. 349, 109-116, 1994
A; Title: The beta-44 amyloid precursor protein binding to copp
A; Reference number: $46251; MUID:94320627; PMID:7913895
A; Contents: annotation; copper binding sites
A; Note: rat peptides were isolated but not sequenced
R; Potempska, A.; Styles, J.; Mehta, P.; Kim, K.S.; Miller, D.L
J. Biol. Chem. 266, 8464-8469, 1991
A; Title: Purification and tissue level of the beta-amyloid pep
A; Reference number: A39820; MUID:91217087; PMID:1673681
       Alzheimer's
C;Species: X
C;Date: 10-J
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A;Molecule type: protein
A;Residues: 18-32 <POT>
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A;Title: Alzheimer's disease amyloidogenic glycoprotein: expression pattern A;Reference number: S00550; MUID:88312583; PMID:2900758
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C; Superfamily: I
C; Keywords: alte
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A;Cross-references: GB
C;Genetics:
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A;Title: Amyloid beta protein precursor is
A;Reference number: A41245; MUID:88264430;
A;Accession: A41245
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                                                                                               RESULT
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A; Residues: 1-695 < SHI>
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A;Accession: S00550
                                                                                                                                                                                                                                                                                                                                           COmment: Deposition of amyloid protein as neurofibrillary tangles and/or plaq; Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type programs alternative splicing; amyloid; glycoprotein; transmembrane protein; 625-648/Domain: transmembrane #status predicted <TMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;Cross-references: UNIPROT:P08592; EMBL:X07648; NID:g55616; PIDN:CAA30488.1; Schubert, D.; Schroeder, R.; LaCorbiere, M.; Saitoh, T.; Cole, G.
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Best Local
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       er's disease amyloid beta protein precursor -
es: Xenopus laevis (African clawed frog)
10-Jun-1993 #sequence_revision 10-Jun-1993 #t
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                                                                                                                                                                                                                                                            Conservative
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Pred. No. 1.1e-
1; Mismatches
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Pred. No. 1.1e-16;
1; Mismatches 3
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PMID:2968652
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#text_change 13-Aug-1999
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S23094
beta-amyloid protein precursor - rat
beta-amyloid protein precursor - rat
C;Species: Rattus norvegicus (Norway rat)
C:nate: 22-Nov-1993 #sequence_revision 10-Nov-1995
                                                                                                                                                                                                                                          R;Chambaud, I.; Heilig, R.; Ferris, S.; Barde, v.; Danibun, D., Uncleic Acids Ree. 29, 2145-2153, 2001
A;Title: The complete genome sequence of the murine respiratory
A;Reference number: A99512; MUID:21267165; PMID:11353084
                                                                                                                                                                                                                                                                                                                                                  ABC transporter atp-binding protein [imported] - Mycoplasma pulmonis (strain C;Species: Mycoplasma pulmonis C;Date: 24-May-2001 #sequence_revision 24-May-2001 #text_change 09-Jul-2004
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A;Residues: 1-33 <KOJ>
C;Superfamily: Alzheimer's disease amyloid beta protein; animal
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FEBS Lett. 304, 57-60, 1992
A;Title: Two-way cleavage of beta-amyloid p
A;Reference number: S23094; MUID:92316198;
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A;Experimental source: larva
C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase
C;Keywords: alternative splicing; amyloid
F;287-337/Domain: animal Kunitz-type proteinase inhibitor homology <BPI>
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R;Okado, H.; Okamoto, H.
Biochem. Biophys. Res. Commun. 189, 1561-1568, 1992
A;Title: A Xenopus homologue of the human beta-amyloid precursor protein: developmental
                                                                                  A;Genetic
                                                                                                                                       A;Molecule type: DNA
A;Residues: 1-165 <KURS
A;Cross-references: UNIPROT:Q98RE5; GB:AL445566; PID:g14089477; PIDN:CAC13237.1;
A;Experimental source: strain UAB CTIP
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A; Residues: 1-747 < OKA>
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85.7%;
Score 58.5; D
Pred. No. 3;
8; Mismatches
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Pred. No. 1e-09;
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Pred. No. 1.2e-16;
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HDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVI

Db 18 NDFNLELDSNKLIFITGPSGSGKTTLLN-MIGNIVL 52
Search completed: November 19, 2004, 15:55:22
Job time: 40 secs

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Result
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PRT; 57 AA. guence update) unotation update) u4 protein homolog (Fragment). (Thalarctos mariti CTaniata; Vertebr.	imilarity 97.6%; Pred. No. 6.46-20; Conservative 0; Mismatches 1; I DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA	5598; C, Takano Y., Sait biological activit bstance p receptor n. 193:624-630(199 o membrane; IEA. EA. P.	PRT; 42 AA. Created) Last sequence update) Last annotation update) ent).).).).).).).).).).).).).)	AAH62082 Q91963 Q6NER1 AAH0R668 Q6DJB6 A4 MOUSE A4 FAAT AAW90259 AAF23169 Q57394 Q9UC33 A4 FUGRU A4 TETFL Q8UUIB
[Contains: Beta-amyloid mus). ata; Buteleostomi; dae; Ursus.	Indels 0; Gaps 0; VIA 42 VIA 42	R., Iwa	ite) ste; Euteleostomi; sviidae; Cavia.	Aah62082 rattus no Q91963 xenopus. ap Q6nrrl xenopus lae Aah70668 xenopus tro Q12023 m amyloid b P08592 r amyloid b P08592 r amyloid b Aam90259 rattus no Aap23169 mus muscu 057394 narke japon Q9uc33 homo sapien 093279 fugu rubrip 073683 tetraodon f Q8uui8 brachydanio

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Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.; "Conservation of the sequence of the Alzheimer's disease amyloid peptide in dog, polar bear and five other mammals by cross-species polymerase chain reaction analysis."; Brain Res. Mol. Brain Res. 10:299-305(1991).

-I- FUNCTION: Functional neuronal receptor which couples to intracellular signaling pathway through the GTP-binding proteir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Alzheimer's disease amyloid A4 protein homolog
protein (Beta-APP) (A-beta)) (Fragment).
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InterPro; IPR008155; A4 APP.
InterPro; IPR001255; Beta-APP.
Pfam; PF03494; Beta-APP; 1.
PRINTS; PR00204; BETAAMYLOID.
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Brain Res. Mol. Brain Res. 10:299-305(1991).
-I- FUNCTION: Functional neuronal receptor which c intracellular signaling pathway through the GT
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                                                                                                                                                                                                                                       MEDLINE=92017079; PubMed=1656157;
                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
TISSUE=Kidney;
                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; (Mammalia; Eutheria; Carnivora;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Canis familiaris (Dog).
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SUBCELLULAR LOCATION: Type I membrane SIMILARITY: Belongs to the APP family.
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MEDLINE-92017079; PubMed-1656157;
Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;
Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;
Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;
Conservation of the sequence of the Alzheimer's disease amyloid
peptide in dog, polar bear and five other mammals by cross-species
peptide in reaction analysis.";
Prain Res. Mol. Brain Res. 10:299-305(1991).
Israin Res. Mol. Brain Res. 10:299-305(1991).
IFUNCTION: Functional neuronal receptor which couples to
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Name=APP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            G(O) (By similarity).
-!- SUBCELLULAR LOCATION: Type I membrane protein.
-!- SIMILARITY: Belongs to the APP family.
                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced by the control of the control 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9986;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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                                                                                                                              ween the Swiss Institute of Bioinf
European Bioinformatics Institute
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                              non-profit institutions as long as and this statement is not removed. U requires a license agreement (See htt
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(Rel. 35, Last sequence update)
(Rel. 44, Last annotation update)
disease amyloid A4 protein homolog
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          license@isb-sib.ch)
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01-NOV-1997 (Rel. 35, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Alzheimer's disease amyloid A4 protein homolog
protein (Beta-APP) (A-beta)] (Fragment).
                                    EMBL; X56130; CAA39595.1; --
HSSP; P08592; INMJ.
InterPro; IPR008155; A4 APP.
InterPro; IPR001255; Beta-APP
Pfam; PF03494; Beta-APP; 1.
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PROSITE; PS00319; A4_EXTRA; PARTIAL.
PROSITE; PS00320; A4_INTRA; PARTIAL.
                                                                                                                                        the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for contenting the statement is not removed.
                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN
                                                                                                                                                                                                                                              polymerase chain reaction analysis.";
Brain Res. Mol. Brain Res. 10:299-305(1991).
-!-FUNCTION: Functional neuronal receptor which couples to intracellular signaling pathway through the GTP-binding G(O) (By similarity).
                                                                                                                                                                                                                                                                                                          Johnstone E.M., Chaney M.O., Norris F.H., Pascual "Conservation of the sequence of the Alzheimer's c peptide in dog, polar bear and five other mammals
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Mammalia; Eutheria;
Caprinae; Ovis.
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SUBCELLULAR LOCATION: Type I membrane protein.
SIMILARITY: Belongs to the APP family.
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                                                                                                                 g requires a license agreement (See http://www.isb-sib.ch/announce/
an email to license@isb-sib.ch).
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PS00320; A4_INTRA; PARTIAL.
Glycoprotein; Transmembrane
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Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little "Conservation of the sequence of the Alzheimer's disease amyl peptide in dog, polar bear and five other mammals by cross-sp polymerase chain reaction analysis.";
Brain Res. Mol. Brain Res. 10:299-305 (1991).
-!- FUNCTION: Functional neuronal receptor which couples to
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HSSP; P08592; 1NMJ.
                                                                                                                                                                                                 Pfam; PF03494; Beta-APP; 1.
PRINTS; PR00204; BETAAMYLOID.
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Mammalia; Eutheria;
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Name=APP;
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InterPro; IPR001255; Beta-APP.
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PS00320; A4_INTRA; PARTIAL.
                                                                                                                                                                                                                                                                                                                                                                           requires a
                                                                                                                                   Glycoprotein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (By similarity)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     58
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(Rel. 35,
(Rel. 44,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disease
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                      20027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
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4, Last annotation update)
amyloid A4 protein homolog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chordata; Craniata; Vertebrata; Eute
Cetartiodactyla; Ruminantia; Pecora;
                                                                                                                                                                                                                                                                                                                                                                           license agreement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96.3%;
97.6%;
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                                       Potential.
Cytoplasmic
                                                                              Beta-amyloid p
Extracellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 210; DB 1;
Pred. No. 8.9e-20;
); Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Beta-amyloid protein (Potential).
Extracellular (Potential).
Potential.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     F434209D88EBA82D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cytoplasmic (Potential)
                                                                                                                                                                                                                                                                                                                                                                           (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          59
                                                                                                                                                                                                                                                                                                                                                                                                              There are no rest
                                         (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ጅ
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disease amyloid
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tent is in
                                                                                                                                                                                                                                                                                                                                                                                                  and
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M W :

F43469D48BA2E12D CRC64;

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RESULT
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Matches
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serpentina serpentina.";

ENVIRON. Health Perspect. 110:269-275(2002).

EMBL; AF54191; AANO4908.1; -

GO; GO:0016021; C:integral to membrane; IEA.

GO; GO:0005408; F:binding; IEA.

InterPro; IPRO01815; A4 APP.

InterPro; IPRO01815; Beta-APP.

PEAM; EP03494; Beta-APP; 1

PRINTS; PR00204; BETAANYLOIDA.

PRINTS; PR00204; BETAANYLOID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
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                                                                                                                                           SEQUENCE FROM N.A.
MEDLINE=98337885; Pul
Barnes N.Y., Li L.,
Milligan C.E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OBJH58;
01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Amyloid beta protein (Fragment).
Chelydra serpentina serpentina (common snapping turtle).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleosto
Testudines; Cryptodira; Testudinoidea; Chelydridae; Chelydra.
NCBI TaxID=134619;
                                                                                                                                                                                                                                                                                                                                                           Amyloid protein (Fragment).
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutel
Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
Gallus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-NOV-1998 (TrEMBLrel. 08, 01-NOV-1998 (TrEMBLrel. 08, 01-MAR-2004 (TrEMBLrel. 26,
                                    "Increased production of amyloid substrate for caspase-3 in dying J. Neurosci. 18:5869-5880(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE; PS00320; A4_INTRA; 1.
NON_TER 1 1
SEQUENCE 113 AA; 12750 MW;
                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               093296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Trudeau V.L., Chiu S., Kennedy S.W., Bro
"Octylphenol (OP) alters the expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE=21876906; PubMed=11882478;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q8JH58
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          AF042098;
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Similarity 97.6%;
41; Conservative
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                                                                                                                                                                               PubMed=9671674;
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Last annotation updat
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Pred. No. 9e-20;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 210; DB 2;
Pred. No. 1.7e-19;
D; Mismatches 1
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                                                                     precursor protein motoneurons.";
                                                                                                                                                                               Schwartz
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ion of members
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                                                                                                                                                                           Ľ.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       update)
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                                                                                                                                                                               Oppenheim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
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turtle, Chelydı
                                                                                                          provides
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                                                                                                                                                                                                                                                                                                                                                                                                                                 Euteleostomi;
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                                                                                                                                                                                                                                                                                                                                                                                                Phasianinae;
                                                                                                                                                                           R.W.,
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RESULT 10 Q6RH29 ID Q6RH2 AC Q6RH2 DT 05-JU

Q6RH29; Q6RH29; 05-JUL-2004

PRELIMINARY; (Tremblrel. 27,

Created)

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RESULT ID PVLLT ID PV
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Best Local S
Matches 41
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Best Local 9
                                                                                                                                                                                                                                                                                                                        Coulson E.J., Paliga K., Beyreuther K., Ma
"What the evolution of the amyloid protein
tells us about its function.";
Neurochem. Int. 0:0-0(2000).
EMBL, AF030341, AAF12698.1; -
GO; GO:0016021; C:integral to membrane; IE
GO; GO:0005488; F:binding; IEA.
InterPro; IPR008155; A4_APP.
InterPro; IPR008155; A4_APP.
InterPro; IPR0081255; Betta APP.
Pfam; PF02177; A4_EXTRA; I.
Pfam; PF02177; A4_EXTRA; I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GO; GO:0016021; C:integral to membrane; IE
GO; GO:0005488; F:binding; IEA.
InterPro; IPR008155; A4_APP.
InterPro; IPR008154; A4_extra.
InterPro; IPR008155; BeTa-APP.
Pfam; PF002177; A4_EXYRA; 1.
Pfam; PF003177; A4_EXYRA; 1.
PRINTS; PR00203; AMYLOIDA4.
PRINTS; PR00203; AMYLOIDA4.
PRINTS; PR00204; BETAAMYLOID.
PROSITE; PS00310; A4_EXTRA; 1.
PROSITE; PS00310; A4_INTRA; 1.
PROSITE; PS00320; A4_INTRA; 1.
PROSITE; PS00320; A4_INTRA; 1.
PROSITE; PS00320; A4_INTRA; 1.
PROSITE; PS00320; A4_INTRA; 1.
                                                                                                                                                                                  PRINTS; PRO0203; AMYLOIDA4.
PRINTS; PR00204; BETAAMYLOID.
PROSITE; PS00319; A4_EXTRA; 1.
PROSITE; PS00320; A4_INTRA; 1.
NON TER 1 1
SEQUENCE 569 AA; 64753 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAY-2000
01-MAY-2000
01-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q9PVL1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Malle-re. (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Calliformes; Phasianidae; Phasiani
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Amyloid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
472
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                                                                                                                    Similarity
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                           DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA
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DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (TrEMBLrel. 13, 0) (TrEMBLrel. 13, 0) (TrEMBLrel. 26, 0) tein (Fragment).
                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                          64753 MW;
                                                                                                               96.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96.3%;
97.6%;
                                                                                         0
                                                                                         Score 210; DB
Pred. No. 8.6e
0; Mismatches
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Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. 8e-
); Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 210;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                          OAB8BB851863A19D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FB53ECC2E66D4C92 CRC64;
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                                                                                                                  DB 2;
.6e-19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C.L.;
                                                                                                                                        Length
                                                                                           Indels
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513
                                               42
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                                                                                                                                           569;
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                                                                                           Gaps
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RESULT 11
Q9DGJ8
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                                                                                                Matches
                                                                                                                        Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
                                                                                                                                                                                                    PRINTS; PR00203; AMYLOIDA4.
PRINTS; PR00204; BETAAMYLOID.
SMART; SM00006; A4 EXTRA; 1.
PROSITE; PS00319; A4 EXTRA; 1.
PROSITE; PS00320; A4 INTRA; 1.
SEQUENCE 695 AA; 78565 MW; F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam; PF02177; A4 EXTRA; 1.
Pfam; PF03494; Beta-APP; 1.
PRINTS; PR00203; AMYLOIDA4.
PRINTS; PR00204; BETAAMYLOID.
SMART; SM00006; A4 EXTRA; 1.
PROSITE; PS00319; Ā4 EXTRA; 1.
PROSITE; PS00320; A4 INTRA; 1.
SEQUENCE 695 AA; 78649 MW; 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAR-2001 (TrEMBLrel. 16, Creat
01-MAR-2001 (TrEMBLrel. 16, Last
01-MAR-2004 (TrEMBLrel. 26, Last
Beta-amyloid protein 695 isoform.
Gallus gallus (Chicken).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sarasa M., Rodolosse A., Sor
Submitted (JUL-2000) to the
EMBL; AF289218; AAG00593.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HSSP;
                                                                                                                                                                                                                                                                                                                                                                         Pfam; PF03194; Beta-APP; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                             GO; GO:0016021; C:integral to m
GO; GO:005488; F:binding; IEA.
InterPro; IPR008155; A4 APP.
InterPro; IPR008154; A4 extra.
InterPro; IPR001255; Beta APP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa;
Archosauria; Aves; N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         дэрслв
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EMBL; AY498707; AAR97727.1; -.
InterPro; IPR008155; A4 APP.
InterPro; IPR008154; A4 extra.
InterPro; IPR001255; Beta-APP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nakata M.;
Submitted (DEC-2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Canis familiaris (Dog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beta amyloid p
Name=beta APP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=9615;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-JUL-2004 (TrEMBLrel. 05-JUL-2004 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P08592; 1NMJ.
                                                                                             41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        _
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41; Conser
                                                                                                                        Similarity
DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA
                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Chordata; Craniata; Vertebrata; Euteleostomi; Neognathae; Galliformes; Phasianidae; Phasiani
                                                                                                                  96.3%;
97.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sorribas V.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Last sequence update)
Last annotation updat
m APP695.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Created)
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                                                                                     Score 210; DB 2
Pred. No. 1e-18;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 210; DB 2
Pred. No. 1e-18;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                membrane; IEA
                                                                                                                                                                                                       F201ED02AEC86D95 CRC64;
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                                                                                                                                               <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 695;
                                                                                                                                               Length 695;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                638
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Canis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Phasianinae;
                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
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RESULT 12
AAR977
ID AAR97
AC AAR97
AC AAR97
AC BECA
DT 02-M2
DT 02-M2
DT 02-M2
DT 02-M2
DT 02-M3
DT 02
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A4_SAIS
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Best Local .
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Q95241;
15-DEC-1998
15-DEC-1998
05-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
05-JUL-2004 (Rel. 44, Last annotation update)
Amyloid beta A4 protein precursor (APP) (Alzheimer's disease amyloid protein homolog) [Contains: Soluble APP-alpha (S-APP-alpha); Soluble APP-beta (S-APP-beta); C99; Beta-amyloid protein 42 (Beta-APP42); Beta-amyloid protein 40 (Beta-APP40); C83; P3(42); P3(40); Gamma-CTF(57) (Gamma-secretase C-terminal fragment 57); Gamma-CTF(50) (Gamma-secretase C-terminal fragment 57); Gamma-CTF(50) (Gamma-secretase C-terminal fragment 50); C31].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Levy E., Amorim A., Frangione B., Wal
"Beta-amyloid precursor protein gene
amyloid angiopathy.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     [1]
SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
Inches
This is a second of the second of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BEIA ARE. (Dog).
Canis familiaris (Dog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Eukaryota; Metazoa; Carnivora; Fissipedia; Canidae; Canis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=Kidney, and Liver; MEDLINE=96108492; PubMed=8532114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Saimiri sciureus (Common squirrel monkey)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         precursor protein genes in dogs.";
Submitted (DEC-2003) to the EMBL/GenBank/DDBJ
EMBL; AY498707; AAR97727.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                             ÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Name=APP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-MAR-2004
02-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR97727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR97727
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=9615;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Sequence analysis
                              cell mobility and transcription regulation through protein-protein interactions (By similarity). Can promote transcription activation through binding to APBBI/Tip60 and inhibit Notch signaling through interaction with Numb (By similarity). Couples to apoptosis-inducing pathways such as those mediated by G(O) and JIP (By similarity). Inhibits G(O) alpha Activity (By similarity). Acts as a kinesin I membrane receptor, mediating the axonal transport of beta-secretase and presentlin 1 (By similarity). May
                                                                                                                                                                                                                                                                                                                             robiol. Aging 16:805-808(1995).

FUNCTION: Functions as a cell surface receptor and performs physiological functions on the surface of neurons relevant physiological functions on the surface of neurons involved neurite growth, neuronal adhesion and axonogenesis. Involved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 597 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DAEFRHDSGYEVHHOKLVFFAEDVGSNKGAIIGLMVGGVVIA 638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (TrEMBLrel. 27, (TrEMBLrel. 27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
   in copper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and chromosomal mapping
genes in dogs.":
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           78649
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   homeostasis/oxidative
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Last annotation 
m App695.
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0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Walker L.C.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    squirrel monkeys with cerebral
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stress through copper
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                                                                                                                                                                                                                                                                                                                                 Involved
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Soluble
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ISOJI-Q95241-2; Sequence=Not described;
-!- DOMAIN: The basolateral sorting signal (BaSS) is required for sorting of membrane proteins to the basolateral surface of epithelial cells (By similarity).
-!- DOMAIN: The NPXY sequence motif found in many tyrosine-phosphorylated proteins is required for the specific binding of the PID domain. However additional amino acids either N- or C-terminal to the NPXY motif are often required for complete interaction. The PID domain-containing proteins which bind APP require the YENPTY motif for full interaction. These interactions are independent of phosphorylation on the terminal tyrosine endocytosis (By similarity).
-!- PTM: Proteolytically processed under normal cellular conditions. Cleavage by alpha-secretase or alternatively by beta-secretase eleads to generation and extracellular release of soluble APP peptides, S-APP-alpha and S-APP-beta, respectively, and the retention of corresponding membrane-anchored C-terminal fragments, campoid-beta 9 peptides. This is the major secretory pathway and is nonamyloid-genic. Alternatively, presentilin/nicastrin-mediated gamma-secretase processing of C99 releases the amyloid beta proteins, amyloid-beta 40 (Abeta40) and amyloid-beta 42 (Abeta42), major components, gamma-CTF(50), gamma-CTF(57) and gamma-CTF(59) (By similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       death directly or is potentiated through Cu(II) mediated low-
density lipoprotein oxidation (By similarity). Can regulate
neurite outgrowth through binding to components of the
extracellular matrix such as heparin and collagen I and IV (By
similarity). The splice isoforms that contain the BPII domain
possess protease inhibitor activity (By similarity).

-! FUNCTION: Beta-amyloid peptides are lipophilic metal chelators
with metal-reducing activity, Bind transient metals such as
copper, zinc and iron (By similarity).

-! FUNCTION: The gamma-CTF peptides as well as the caspase-cleaved
peptides, including (Cl1, are potent enhancers of neuronal
apoptosis (By similarity).

-! SUBUNIT: Binds, via its C-terminal, to the PID domain of several
cytoplasmic proteins, including APBB family members, the APBA
family, MAPKBIFI, and SHC1, Numb and Dabl (By similarity). Binding
to Dabl inhibits its serine phosphorylation (By similarity). Binding
to via its TPR domains) (By similarity). APBBP (via BaSS) and DDB1.
In vitro, it binds MAPT via the MT-binding domains (By
similarity). Associates with microtubules in the presence of ATP
and in a kinesin-dependent manner (By similarity).

-! SUBCELULAR LOCATION: Type I membrane protein. Cell surface
protein that rapidly becomes internalized via clathrin-coated
pite. During maturation, the immature APP (N-glycosylated in the
endoplasmic reticulum) moves to the Golgi complex where complete
maturation occurs (0-glycosylated and sulfated). After alpha-
secretase cleavage, soluble APP is released into the extracellular
space and the C-terminal is internalized to endosomes and
lysosomes. Some APP accumulates in secretory transport vesicles
and muclei of neurons (By similarity).

-LATERNATIVE proDUCTS:

Event-shier and a solution is solutioned in soforms 2:
                                    PTM: Proteolytically cleaved by caspases during neuronal apoptos (By similarity). Cleavage at Asp-720 by either caspase-3, -8 or results in the production of the neurotoxic C31 peptide and the increased production of beta-amyloid peptides (By similarity). PTM: N- and O-glycosylated (By similarity) and O-glycosylated (By similarity). PTM: Phosphorylation in the C-terminal on tyrosine, threonine are residues is neuron-specific. Phosphorylation can affect be serine residues is neuron-specific.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Name=APP695;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IsoId=Q95241-1; Sequence=Displayed;
differentiation and interaction with
                                    threonine and can affect AP
                                                                                                                                                                                                                                                                                                                                           apoptosis
                                         APP
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PRINTS; PRO0203; AMYLŌIDA4.
PRINTS; PRO0759; BASICPTASE.
PRINTS; PRO0204; BETAAMYLOID.
PRODOM; PD000222; KUNÎLZ BPTI; 1
SMART; SM00006; A4 EXTRA; 1.
SMART; SM000131; KU; 1.
                                                                                                              TRANSMEM DOMAIN DOMAIN
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PROSITE; PS00320; A4 INTRA; 1.

PROSITE; PS00320; AF INTRA; 1.

PROSITE; PS00280; BPTI KUNITZ 1; 1.

PROSITE; PS00279; BPTI KUNITZ 2; 1.

Alternative splicing; Amyloid; Apoptosis; Cell adhesion; Coated pits;

Alternative splicing; Amyloid; Apoptosis; Cell adhesion; Coated pits;
                                                                                                                                                                                                                                                                                                                                                                                                                               Alternative splicing; Amyloid; Apoptosis; Cell adhesion; Copper; Endocytosis; Glycoprotein; Heparin-binding; Iron; Metal-binding; Phosphorylation; Proteoglycan;
                                                                                                                                                                                                                                                                                                                                                                                                       SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                    Serine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR008155; A4 APP.
InterPro; IPR008154; A4 extra.
InterPro; IPR001255; Beta-APP.
InterPro; IPR002222; Prot Inh Kunz-m.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  modified
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF02177; A4_EXTRA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      proteins (By similarity).

MISCELLANEOUS: Chelation of metal ions, notably copper, iron and zinc, can induce histidine-bridging between beta-amyloid molecules resulting in beta-amyloid-metal aggregates (By similarity).

Extracellular zinc-binding increases binding of heparin to APP and inhibits collagen-binding (By similarity).

SIMILARITY: Belongs to the APP family.

SIMILARITY: Contains 1 BPTI/Kunitz inhibitor domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           s SWISS-PROT entry is copyright. It is produced through ween the Swiss Institute of Bioinformatics and the EN European Bioinformatics Institute. There are no restriby non-profit institutions as long as its content
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PF03494; Beta-APP; 1.
PF00014; Kunitz BPTI; 1.
S; PR00203; AMYLOIDA4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S81024; AAD14347.1; -. P08592; INMJ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   non-profit institutions as long as its content is and this statement is not removed. Usage by and for requires a license agreement (See http://www.isb-sib
                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                    inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                   Signal;
Reactive bond.
Cleavage (by beta-secretase)
similarity).
Cleavage (by caspase-6) (By
                                                                                                               Heparin-binding (By similarity). Heparin-binding (By similarity) Heparin-binding (By similarity) Collagen-binding (By similarity) Interaction with G(o)-alpha (By
                                                                                                                                                                                                                                       Gamma-CTF(50) (Potential).
                                                                                                                                                                                                                                                                 Gamma-CTF(59) (Potential).
Gamma-CTF(57) (Potential).
                                                                                                                                                                                                                                                                                      P3(42) (Potential).
P3(40) (Potential).
                                                                                                                                                                                                                                                                                                                               Beta-amyloid
Beta-amyloid
                                                                                                                                                                                                                                                                                                                                                                Amyloid beta A4 protein.
Soluble App-alpha (Potential).
Soluble App-beta (Potential).
                                                               Poly-Thr.
Required for
                                                                                                     similarity)
                                                                                                                                                                    BPTI/Kunitz inhibitor
                                                                                                                                                                           Heparin-binding (By similarity).
ZINC-BINDING (BY SIMILARITY).
                                                                                                                                                                                                     Potential.
Cytoplasmic
                                                                                                                                                                                                                               Extracellular (Potential).
                                                                                                                                                                                                                                                                                                                                                         C99 (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                         similarity.
                                                                                                                                                                                                                                                                                                                  a-amyloid protein
a-amyloid protein
(Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                    Transmembrane;
                                                                                                                                                                                                                                                                                                      (Potential).
                                                                                                                                                                                                       (Potential)
                                                               copper(II)
                                                                                                                                                                                                                                                                                                                               40
                                                                                                                                                                                                                                                                                                                               (Potential). (Potential).
                                                                 reduction
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SITE

(by caspase-6) (By similarity).

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Q6RH28
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                                                                                    Query Match
Best Local S
Matches 41
                                                                                                                                                               C -!- SIMILARITY: Contains 1 BPTI/Kunitz inhibitor domain.

R EMBL; AY498708; AAR97728.1; -.

R InterPro; IPR008154; A4_APR.
R InterPro; IPR008154; A4_EXTRA.
R InterPro; IPR002125; Beta-APP.
R InterPro; IPR002223; Prot Inh_Kunz-m.
Pfam; PF02177; A4_EXTRA; 1.

R Pfam; PF03194; Beta-APP; 1.

R Pfam; PF0014; Kunitz BPTi; 1.

R Pfam; PF00102; AMYLOIDA4.
R PRINTS; PR00203; AMYLOIDA4.
R PRINTS; PR00204; BETAAMYLOID.
R PRINTS; PR00204; BETAAMYLOID.
R PRINTS; PR00204; BETAAMYLOID.
R PRINTS; PR000204; BETAAMYLOID.
R PRINTS; PR000306; A4_EXTRA; 1.
R SMART; SM00131; KU; 1.
R PROSITE; PS00319; A4_EXTRA; 1.
R PROSITE; PS00319; A4_EXTRA; 1.
R PROSITE; PS00300; BATI_KUNITZ_1; 1.
R PROSITE; PS00280; BBTI_KUNITZ_1; 1.
R PROSITE; PS00280; BBTI_KUNITZ_2; 1.
SEQUENCE 751 AA; 84832 MW; 7541A947B46DA5A4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nakata M.;
Submitted (DEC-2003) to the EMBL/GenBank/DDBJ databases.
--- STMILARITY: Contains 1 BPTI/Kunitz inhibitor domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Name=beta APP;
Canis familiaris (Dog).
Canis familiaris (Dog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SITE
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Q6RH28;
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41; Conserv
                                                                                                           Similarity
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                      DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
DABFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA
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nilarity 97.6%;
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llarity 97.6%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Last sequence update)
Last annotation update)
m APP751.
                                                                               Score 210; DB 2;
Pred. No. 1.1e-18;
0; Mismatches 1
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similarity).
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Pred. No. 1.1e-18;
D; Mismatches 1
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                                                                                                                        Length 751;
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694
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Canis.
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D ODDGJ7

AC QPDGJ7;

AC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasian
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Q9DGJ
AC OL-MA
DT 01-MA
DT 01
Search completed: November Job time : 198 secs
                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPRO08155; A4_APP.
InterPro; IPRO08154; A4_EXTRA.
InterPro; IPRO0255; Beta-APP.
InterPro; IPRO02223; Prot Inh_Kunz-m
pfam; PF02177; A4_EXTRA; I.
Pfam; PF02177; A4_EXTRA; I.
Pfam; PF00014; Kunitz_BPTI; 1.
Pfam; PF000014; Kunitz_BPTI; 1.
PRINTS; PR00203; AMYLOIDA4.
PRINTS; PR00759; BASICPTASE.
PRINTS; PR00729; BASICPTASE.
PRINTS; PR007204; BETAAMYLOID.
PRODOm; PD000022; Prot Inh_Kunz-m; 1
SMART; SM00006; A4_EXTRA; I.
SMART; SM00006; A4_EXTRA; I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SMART; SM00131; KU, 1.

PROSITE; PS00310; A4_INTRA; 1.

PROSITE; PS00320; A4_INTRA; 1.

PROSITE; PS00280; BFTI_KUNITZ 1; 1.

PROSITE; PS50279; BFTI_KUNITZ_2; 1.

PROSITE; PS50279; BFTI_KUNITZ_2; 1.

SEQUENCE 751 AA; 84705 MW; E78E9413A8033D84 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GO; GO:0016021; C:integral to
GO; GO:0005488; F:binding; IEA
GO; GO:0004867; F:serine-type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                       653
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                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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                                                                                                                                                                                       DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 694
                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                     96.3%;
97.6%;
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                                           2004,
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                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                     Score 210; DB 2;
Pred. No. 1.1e-18;
0; Mismatches 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Phasianinae;
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Result
No.
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Maximum DB seq length: 200000000
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Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score March
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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      GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd
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US-08-339-141A-1

PCT US95-14659-1

US-07-744-767A-2

US-08-179-574-1

US-08-462-859A-19

US-08-464-247A-19

US-08-464-247A-19

US-08-464-246A-1

US-08-464-246A-1

US-08-464-246A-1

US-08-464-246A-1

US-08-302-808-5

US-08-302-808-5

US-08-303-909-9

US-08-268-348A-1

US-08-68-348A-1

US-08-68-348A-1

US-08-68-348A-1

US-08-68-348A-1

US-08-68-245A-4

US-08-68-948-5

US-08-918-940-1

US-08-918-930-1

US-08-922-930-2

US-08-922-930-2

US-08-923-055-2

US-08-923-055-2
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Query M Best Lou Matches	RESULT 1 Sequence 1, Sequence 1, Sequence 1, Patent No. General II APPLICAL ITTLE 0 ITTLE 0	00000000000000000000000000000000000000
atch cal Sim 42;	IA-1 Appl 61141 FORMAL FORMAL FORMAL APPLIA	210 96. 210 96.
100.0 ilarity 100.0 Conservative	1 14133 Subjection US/08339141A 14133 Subject, Peter A. Vigo-Peifrey, Carmen Schenk, Dale B. Barbour, Robin (x-y41) SEQUENCES: 2 ENCE ADDRESS: E	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0%; Score 2 0%; Pred. N 0; Misma	39141A A. A. armen ar for Aid mer's Dis) Townsend , Steuart , Ste	US-09-731-460-1 US-09-133-866-2 US-09-723-384-1 US-09-724-961-42 US-09-724-552-1 US-09-580-018-42 US-09-724-489-1 US-09-724-477-1 US-09-724-477-1 US-09-724-551-42 PCT-US92-06700-2 PCT-US93-00325-1 US-08-235-400-1 US-08-235-400-1 US-08-335-400-1 US-08-3302-808-6
ore 218; DB 3; ed. No. 7.3e-25; Mismatches 0;	ng in the ase by Med hourie and Tower, Sui	18 O O O O O O O O O O O O O O O O O O O
Length 43; ; Indels	ring 2000	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
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PCT-US95-14659-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 42; Conservative 0
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                                                                                                                                                                                                                           Sequence 2, Application US/07744767A Patent No. 5434050 GENERAL INFORMATION:
                                                                                             APPLICANT: Maggio, John E.
APPLICANT: Mantyh, Patrick W.
TITLE OF INVENTION: Labelled -
TITLE OF INVENTION: for Use in
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 415-326-24
TELEFAX: 415-326-2422
INFORMATION FOR SEQ ID NO:
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MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPUTED:
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
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ADDRESSEE: Townsend and Townsend Khourie and Crew

ADDRESSEE: Townsend and Townsend Khourie and Crew

ADDRESSEE: Townsend and Townsend Khourie and Crew

ADDRESSEE: Townsend and Townsend Khourie and Crew
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION: NAME: Heslin, James M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
COUNTRY:
                                                          STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 43 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: PCT/US FILING DATE: April 7, 1995 CLASSIFICATION:
                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                  1 DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
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San Francisco
                                    Minneapolis
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                                                            3500 IDS Center
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                                                                              Schwegman, Lundberg & Woessner, P.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peter A.
                                                                                                                                        Labelled -Amyloid Peptide and Methods for Use in Detecting Alzheimer's Disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCT/US95/14659
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US-08-179-574-1
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                                                                               CLASSIFICATION: 514
PRIOR APPLICATION NUMBER: US 07/819
APPLICATION NUMBER: US 07/819
FILING DATE: 13-JAN-1992
ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
REGISTRATION NUMBER: 32,227
REGISTRATION NUMBER: 12,227
REFERENCE/DOCKET NUMBER: HU90
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Huntington Potter
APPLICANT: Usamah Kayyali
TITLE OF INVENTION: Compounds and Methods for Inhibiting
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 612-339-3061
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
TELEFAX: 617-861-9540
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/179,574
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NAME: Mueting, Ann M.
REGISTRATION NUMBER: 33,977
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
PARTICATION NUMBER- 110, VOZ/A/A 7673
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MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 60
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-339-0331
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: Two Militia L
CITY: Lexington
STATE: Massachusetts
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TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: UZIP: 02173
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Similarity 97.6%;
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Two Militia Drive
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                                                                                                                              HU90-03A3
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Pred. No. 1e-23;
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US-08-462-859A-19
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                                                                                                                                                                                                                                                                                                                 US-08-347-144-1
Sequence 19, Application US/08462859A
Patent No. 5652092
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Jacobsen, J. S.
APPLICANT: Vitek, M. P.
TITLE OF INVENTION: No. 5652092el Amyloid Precursor and Method
TITLE OF INVENTION: Using Same to Access Agents Which Down-Regu
                                                                                                                                                                                                                                                                               Query Match
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PILING DATE:
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: AUERBACH, JEFFREY I.
REGISTRATION UNMBER: 32,680
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (202) 383-661
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: ANDERS
                                                                                                                                                                                                                                                                                                                                               FRAGMENT TYPE: ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: METHODS FOR THE PREVENTION AND TREATMENT TITLE OF INVENTION: OF VASCULAR HEMORRHAGING AND ALZHEIMER'S DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: I
                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 1299 PENT CITY: WASHINGTON
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                                                                                                                                                                                                                                                                                                                                                                                                                        amino acid
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1299 PENNSYLVANIA AVENUE, N.W.
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97.6%;
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Pred. No. 1e-23;
0; Mismatches
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   Down-Regulate Formation
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RESULT 7
US-08-123-659A-19
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Patent No. 5656477
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Jacobsen, J. S.
APPLICANT: Vitek, M. P.
APPLICANT: Vitek, M. P.
TITLE OF INVENTION: No. 5656477el Amyloid Precursor and Method of
TITLE OF INVENTION: Using Same to Access Agents Which Down-Regulat
TITLE OF INVENTION: of B-Amyloid Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM PC COMPOSITION OF THE POPPOSITION OF THE POPPOSITION OF THE POPPOSITION OF THE POPPOSITION DATA:
CURRENT APPLICATION DATA:
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NAME: Barnhard, Elizabeth M.
REGISTRATION NUMBER: 31,088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION UNMBER: US/08/462,859A FILING DATE: 05-JUN-1995
 ATTORNEY/AGENT INFORMATION: NAME: Rosenblum, Anne M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
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CORRESPONDENCE ADDRESS:
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STREET:
Wayne
New 7
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                               APPLICATION NUMBER: US/08/123,659A FILING DATE: 20-SEP-1993 CLASSIFICATION: 435
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OPERATING SYSTEM:
                                                                                                                                                                                                                                                 CITY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: United States
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
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Similarity 97.6%;
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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Anne
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                                                                                                       Version #1.25
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Best Local Similarity 97.6%;
Matches 41; Conservative
                                                                    Matches
                                                                                     Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Jacobsen, J. S.
APPLICANT: Vitek, M. P.
APPLICANT: Vitek, M. P.
TITLE OF INVENTION: No. 5693478el Amyloid Precursor and Method of
TITLE OF INVENTION: Using Same to Access Agents Which Down-Regulate Formation
TITLE OF INVENTION: of B-Amyloid Peptide
                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPALLBLE
OPERATING SYSTEM: PC_DOS/MS_DOS
SOFTWARE: Patentin Release #1.0, Vers
SOFTWARE: Patentin Release #1.0, Vers
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/464,247A
PILING DATE: 05-UN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Barnhard, Elizabeth M.
REGISTRATION NUMBER: 31,088
REFERENCE/DOCKET NUMBER: 31,844-03
TELEPHONE: 201-683-2158
TELEPHONE: 201-683-2158
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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STREET: Parsippany
CITY: Parsippany
CTATE: New Jersey
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LENGTH: 42 amino acids
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                                                                                                                                                       TOPOLOGY: linear MOLECULE TYPE: protein
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MEDIUM TYPE: Floppy
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                                                                                                                                                                                                               TYPE: amino acid
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TOPOLOGY: linear
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                                                                                                                                                                                                                                  42 amino acids
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                                                                    Conservative
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                                                                                     96.3%;
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Pred. No. 1e-23;
0; Mismatches
                                                                                     Score 210; DB 1
Pred. No. 1e-23;
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                                                                    Indels
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                                                                                                                                                                                                                                                          Sequence 1, Application US/08476464A
Patent No. 5707821
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: RYDEL, RUSSELL E.
APPLICANT: DAPPEN, MICHAEL S.
TITLE OF INVENTION: THERAPEUTIC INHIBITION OF PHOSPHOLIPASE
TITLE OF INVENTION: A2 IN A-BETA PEPTIDE-MEDIATED NEURODEGENERATIVE DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19, Applicat Patent No. 5703209 GENERAL INFORMATION:
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APPLICATION NUMBER: US/08/464,:
PILING DATE: 05-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: BARTHART INFORMATION:
NAME: BARTHART INFORMATION:
REGISTRATION NUMBER: 31,088
REFERENCE/DOCKET NUMBER: 31,84
TELECOMMUNICATION INFORMATION:
TELEPHONE: (201)831-3246
TELEPAX: (201)831-3246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (201)831-3305
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
             ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatish
                                                                                                                                                                                      NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: TOWNSEND
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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APPLICANT: Vitck, M. P.
TITLE OF INVENTION: No. 5703209el Amyloid
TITLE OF INVENTION: Using Same to Access
TITLE OF INVENTION: of B-Amyloid Peptide
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CORRESPONDENCE ADDRESS:
ADDRESSES: American Cyanamid Company
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CITY: W
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                                                                                                                                                 ADDRESSEB: TOWNSEND & TOWNSEND & CREW LLP STREET: TWO EMBARCADERO CENTER, 8TH FLOOR CITY: SAN FRANCISCO
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                                                                                                                                 STATE:
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  OPERATING SYSTEM:
                                                                                                      COUNTRY: U.S.A.
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                                                                                                                                 CALIFORNIA
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PC-DOS/MS-DOS
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ng Same to Access Agents Which Down-Regulate Formation
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CURRENT APPLICATION DATA:

APPLICATION NUMBER:

US/08/476,464A

SOFTWARE: PatentIn Release #1.0, Version

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence 2, Application US/08304585
Patent No. 5721106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
   Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (415)576-030 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                 TELEFAX: 612-305-1228 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, 1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/304,585
FILING DATE: 12-SEP-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 55458-1415
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
TYPE: amino acid
STRANDEDNESS: not relev
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Mueting, Raasch, Gebhardt & Schwappach, P.A.
STREET: P.O. Box 581415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Maggio, John B.
APPLICANT: Mantyh, Patrick W.
TITLE OF INVENTION: LABELLED !
TITLE OF INVENTION: METHODS FOR SEQUENCES: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: STORELLA, JOHN R.
REGISTRATION NUMBER: 32,944
REFERENCE/DOCKET NUMBER: 15
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
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LENGTH: 42 amino acids
                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
                                                         MOLECULE TYPE:
                                                                                                                                                                                                                                        NAME: Mueting, Ann M.
REGISTRATION NUMBER: 33,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: P.O. Box : CITY: Minneapolis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (415)326-2400
TELEPHAX: (415)576-0300
TELEFAX: (415)576-0300
TELEFAX: 110 NO: 1:
                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 07-JUN-1995
CLASSIFICATION: 514
                                                                                                                                                                                                      TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
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                                                                         SS: not relevant not relevant
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                                                       peptide
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97.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LABELLED BETA-AMYLOID PEPTIDE AND METHODS FOR USE IN DETECTING ALZHEIMER'S DISEASE
   96.3%;
                                                                                                                                                                                                                                                      33,977
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 Score 210;
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DB 1;
Length 42;
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RESULT 12
US-08-302-808-5
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                                                                   US-08-302-808-5
   Matches
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GENERAL INFORMATION:
                                 Query Match
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                                                                                                                                                                                                                                                                                                                                    FILING DATE: 25-JAN-1993
APPLICATION NUMBER: 019035,
FILING DATE: 05-FEB-1993
APPLICATION NUMBER: 286985,
FILING DATE: 16-NOV-1993
APPLICATION NUMBER: 34773,
FILING DATE: 28-DEC-1993
APPLICATION NUMBER: 34773,
FILING DATE: 19-EC-1993
ATTORNEY AGENT INFORMATION:
NAME: DAVID, RESNICK S
REGISTRATION NUMBER: 34,23
                                                                                                                                                                                                                                           TELEX: 200291 STRE INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/302,000
APPLICATION IS-SEP-1994
FILING DATE: 15-SEP-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: PCT/JP94/00089
                                                                               FRAGMENT TYPE:
ORIGINAL SOURCE:
                                                                                                               HYPOTHETICAL: 1
                                                                                                                                             MOLECULE TYPE:
                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 617-523-3400
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APPLICANT: KITADA, Chieko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: PCT/
FILING DATE: 24-JAN-1994
APPLICATION NUMBER: 0101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM CON
OPERATING SYSTEM:
                                                                                                                                                            TYPE: amino acid
STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                                                                                                                                                                         TELEFAX:
                                                                                                                                                                                                                                                                                         TELEPHONE:
                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
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                                                                                                                                                                                                           ENGTH:
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                Similarity
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                                                                                                                                                                                                          42 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FastSEQ Version 1.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IBM Compatible
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                                                                                               N-terminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Diskette
                                                                                                                                               peptide
                                                                                                                                                                           single
                96.3%;
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Score 210; DB 1; Length 42; Pred. No. 1e-23; O; Mismatches 1; Indels
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0; Mismatches
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Gaps
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1 DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42

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DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

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Sequence 2, Application US/08433734
Patent No. 5837473
GENERAL INFORMATION:
APPLICANT: Maggio, John E.
APPLICANT: Maggio, John E.
APPLICANT: Mantyh, Patrick W.
TITLE OF INVENTION: Labelled -Am
TITLE OF INVENTION: for Use in De
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                 US-08-433-734-2
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                                                                                                                                                                                  RESULT 14
                                                                                                                                                                                                                                                                                                                                                                   US-08-268-348A-1
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                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/268,348A FILING DATE: 29-JUN-1994 CLASSIFICATION: 435 PRIOR APPLICATION DATA: APPLICATION NUMBER: EP 93110755.1 FILING DATE: 06-JUL-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·08-268-348A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Dobeli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (201) 235-3500 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: peptide FRAGMENT TYPE: N-terminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
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 ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Parise, John P.
REGISTRATION NUMBER: 34
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Nutley
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)GY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Draeger, Nicholas
Trottman, Gerda H
Jakob, Peter
                                                                                                                                                                                                                                                                                                  Conservative
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Mueting, Raasch, Gebhardt & Schwappach, P.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hoffmann-La Roche Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (201)
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                                                                                                                                                                                                                                                                                                               96.3%;
97.6%;
                                Labelled -Amyloid Peptide and Methods for Use in Detecting Alzheimer's Diseas 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Process for Producing Hydrophobic Polypeptides and Proteins, and Fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               34,403
                                                                                                                                                                                                                                                                                                0,
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                                                                                                                                                                                                                                                                                                              Score 210; DB 1
Pred. No. 1e-23;
                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Version #1.25
                                                                                                                                                                                                                                                                                                                                DB 1; Length 42;
                                                                                                                                                                                                                                                                                                1; Indels
                                                 Disease
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US-08-609-090-9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                               COUNTRY: USA
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                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
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; MOLECULE TYPE: peptide US-08-433-734-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 41; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 612-305-1228
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/433,734
FILING DATE: 03-MAY-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 55458-1415
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
REFERENCE/DOCKET NUMBER: 43
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-684-1111
                                                      ATTORNEY/AGENT INFORMATION:
NAME: Kraus, Eric J.
REGISTRATION NUMBER: 36,190
                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-305-1220
                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                   CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
                                                                                                                     APPLICATION NUMBER: US/08/609,090 FILING DATE: 29-FEB-1996 CLASSIFICATION: 530
                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                          STREET: 99 Canal Center Plaza, Suite 300 CITY: Alexandria STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: P.O. Box | CITY: Minneapolis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Mueting, Ann M. REGISTRATION NUMBER: 33,977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HENSLEY, Kenneth
BUTTERFIELD, D. A.
CARNEY, John M.
AKSENOV, Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               42 amino acids
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                                                                                                                                                                                                                                                            Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A PROCESS FOR ENHANCING THE ACTIVITY OF AN OLIGOPEPTIDE OR POLYPEPTIDES
                                          434-059
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Pred. No. 1e-23;
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GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd

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Minimum DB
Maximum DB
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No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Title:
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   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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seq length: 2000000000
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218
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  Maximum Match 1886
Listing first 45
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geneseqp2002s:*
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geneseqp2004s:*
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geneseqp2000s:*
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AAR20330
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AAW12828
AAW12828
                   AAW42989
AAW47230
AAY496911
AAW99585
AAW89586
AAW829093
AAW29093
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Aaw99585
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Human bet
Mutant ag
Synthetia
Complete bi
A-beta-bi
Human bet
Human tac
Human amy
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Full leng
Beta-amyl
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Beta/A4-a
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Sequence
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45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210
96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3		96.3	96.3
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Aam51864			Aau93988	Aau96896	Aag68314	Aae26080	Aau76483	Aao15848	Aae25335	Abb76029	Aae21438	Abg94281 .		Aau80961	Abb81321	Aae05484	Aab48830	Aab49395 1	Aab82622
Neuronal	Human amy	Human bet	Human bet	Human Amy	Human bet	Beta amyl	Amino aci	Beta-amyl	Modified	Beta amyl	Human bet	Amyloid b	Human amy	Human amy	Amyloid p	Human pep	Human amy	Human amy	Amyloid-b

ALIGNMENTS

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RESULT 1
AAU75939
ID AAU7
Region
                                                                                                                                                                                                                                                                                                                                              Human; Abeta-arc; amyloid beta; arctic mutation; Alzheimer's disease; protofibril compound; immunisation; anti-protofibrillar activity; amyloid precursor protein; APP; amyloid plaque; Arctic mutation; transgenic; neurodegenerative disease; antibody; vaccine; mutant; mutein.
                                                                                                                                                                                                                                                                                                         Key
                                                                                                                               07-JUL-2000; 2000EP-00202387
10-JUL-2000; 2000US-0217098P
                                                                                                                                                             05-JUL-2001; 2001WO-SE001553
                                                                                                                                                                                                                                  Misc-difference
                                                                                                                                                                                                                                                                          Region
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                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAU75939 standard; peptide;
                                                                                                          (LANN/) LANNFELT L
                                                                                                                                                                                                     WO200203911-A2
                                                                                                                                                                                                                                                                                                                                                                                                  Human amyloid beta-arc peptide (Abeta-Arc).
                                                                                        Naeslund J,
                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                         16..24 "---- "Dipure Dinging motif"

/note= "Peptide with protofibril-forming activity. This peptide is specifically claimed in claim 2 of the specification"
                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                       /note= "Wild-type Glu substituted with Gly
                                                                                                                                                                                                                                                                                                                                                                                                                                                             42
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Claim 8; Page 19; 25pp; English

disease

WPI; 2002-148117/19.

Lannfelt L,

Westlind-Danielsson

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Nilsberth

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Use of non-wild type protofibril or a compound with protofibril forming ability for immunization for prevention or treatment of Alzheimer's

invention

with protofibril forming ability for immunisation of

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Best Local S
Matches 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amyloid precursor protein; A-beta peptide; angiogenesis; psoriasis; angiogenesis-mediated disease; cancer; arthritis; atherosclerosis; macular degeneration; diabetic retinopathy; Alzheimer's disease; cerebral amyloid angiopathy; cerebrovascular disease; brain injury.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 42
                                                                                                                             Inhibiting angiogenesis, and preventing or alleviating the symptoms angiogenesis-mediated disease, e.g. cancer, arthritis or atheroscler comprises increasing in vivo concentrations of an A-beta peptide in
                                                             Claim 3; Page
                                                                                                                                                                                                                                                                 Paris
                                                                                                                                                                                                                                                                                                                                                                                                12-AUG-2002;
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                                                             13; 85pp; English
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Pred. No. 4.6
0; Mismatches
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. No. 4.6e-23;
smatches 0;
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The present protein, and

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sequence represents a peptide derived from d designated 22G-A-beta1-42 (Arctic) mutant

n amyloid _| : peptide.

precursor . A-beta

Query Match Best Local S Matches 41

Similarity

96.3%;

Conservative

0

Score 210; DB 2; Pred. No. 6.1e-22; 0; Mismatches 1

Length 42

Indels

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Sequence 42

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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           describes a method of inhibiting angiogenesis, and preventing or alleviating the symptoms of an angiogenesis-mediated disease in a patient. The method comprises increasing in vivo concentrations of an Abeta peptide within the patient. The Abeta peptides are useful for preventing or alleviating angiogenesis-mediated diseases such as cancer, arthritis, atherosclerosis, psoriasis, macular degeneration and diabetic retinopathy. A-beta peptide antagonists may be used to treat Alzheimer's disease, cerebral amyloid angiopathy, cerebrovascular disease in the presence of Alzheimer's disease, or traumatic brain injury
                                          The inventors specifically claim transgenic mice contg. DNA encoding A42 (beta-amyloid precursor protein) (AAR20330), A99 (beta-amyloid carboxy tail) (AAR20329), A695 (beta-amyloid precursor protein), A751 (precursor plus inhibitor) or A41 (protease inhibitor) (AAR20328). Human fibroblast cDNA clone lambdaAPCP16814 was deposited at ATCC on July 1, 1987 and has accession No. 40347. The promoter is pref. the NSE promoter with the A751 or the A695 sequence. (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                       Transgenic mice as models for studying Alzheimer's disease proteins contg. cells with promoter and beta-amyloid precursor protein deoxyribonucleic acid, useful for testing anti-alzheimer's drugs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAR-2003
14-APR-1992
                                                                                                                                                                           Disclosure; Fig 3; 98pp; English.
                                                                                                                                                                                                                                                                                                                                                                    15-JUN-1990;
17-JUN-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               plaque
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Transgenic mice; Alzheimer's disease; diagnosis; beta-amaloid precursor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR20330;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         peptides are used in the method of the invention.
                                (Updated
                                                                                                                                                                                                                                                                                                                                      (CALD ) CALIFORNIA BIOTECHNOLOGY
                            the A695 sequence. (Updated on 25-MAR-2003
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(first entry)
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91US-00716725
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Pred. No. 4.6e-23;
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RESULT 5
AAR95248
ID AAR9
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AC AAR9
DT 20-J
XX
DE Beta
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05-FEB-1993;
16-NOV-1993;
28-DEC-1993;
                                                                                                                                                                                                                            Antibodies which recognise specific subfragments of the beta-amyloid protein are claimed. Specifically, the antibodies (which are pref. monoclonal) recognise residues 1-16 and/or 1-28 from the N-terminal portion of beta-amyloid or they recognise residues 25-35 or 35-43 from the C-terminal portion. The antibodies are useful for assaying beta-amyloid and its derivatives for diagnosis of Alzheimer's disease. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                Antibodies recognising specific parts of beta-amyloid - can be used diagnosis of diseases implicating beta-amyloid, such as Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAR-2003
15-MAR-1995
Beta/A4-amyloid peptide
                      20-JAN-1997
                                                                                                                                                                                                         Sequence 42
                                                                                                                                                                                                                                                                                                                  Disclosure; Page 83; 116pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1994-264110/32.
                                                                                                                                                                                                                                                                                                                                                                                                        Suzuki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-AUG-1994.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          anti-beta-amyloid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Amyloid precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Beta-amyloid (1-42).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR60366
                                                                 AAR95248 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-JAN-1994;
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                                                                                                                                                                          Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                            TAKEDA
                                                                                                                                DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard;
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                                                                                                                   DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA
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93JP-00019035.
93JP-00286985.
93JP-00334773.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein; APP; Alzheimer's disease; beta-amyloid;
antibody; diagnosis.
                                                                peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
                                                                                                                                                                        96.3%;
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                                                                                                                                                             Score 210; DB 2; I
Pred. No. 6.1e-22;
D; Mismatches 1;
                                                                                                                                                                                 Length 42;
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RESULT 6
AAR94591
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                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local (
                                                                             Beta-amyloid; Alzheimer's disease; cholinesterase; lipase; ebelactone-A; serine protease; para-amidinophenylmethanesulphonyl fluoride; inhibition; complex formation; alpha(1)-antichymotrypsin; Down's diseases; ageing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Use of agents which bind beta-amyloid peptide - for diagnosis, prevention and treatment of vascular damage caused by amyloid deposits, partic. in haemorrhaging and Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Beta/A4-amyloid peptide; tissue plasminogen activator; Alzheimer's disease; stimulation; investigation; pathogenesis; hereditary cerebral haemorrhage with amyloidosis-Dutch type; c
                                                                                                                                              Alzheimer amyloid beta-protein active site sequence.
                                                                                                                                                                             25-MAR-2003
21-AUG-1996
                                                                                                                                                                                                                               AAR94591;
                                                                                                                                                                                                                                                             AAR94591 standard; peptide; 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1996-268332/27
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                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                DAEFRHDSGYEVHHOKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
                                                                                                                                                                                                                                                                                                                                               DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
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                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                             (revised)
(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     angiopathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                96.3%;
97.6%;
                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                Score 210; DB 2;
Pred. No. 6.1e-22;
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 42;
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US5506097-A

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RESULT 7
AAM12828
ID AAM1
XX AAM1
AC AAM1
XX Beta
XX Beta
XX Beta
XX Beta
XX Homc
XX Hom
XX Goy;
XX Goy;
XX Goy;
XX Det;
YI Goy;
XX Det;
YI Det;
YI Det;
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Matches
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13-JAN-1992;
13-JAN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This is the sequence of a fragment of the beta-amyloid protein associated with Alzheimer's disease. The protein contains esterase (cholinesterase and lipase) activities based on active site similarities with serine proteases (see AAR94592-96). The esterase activity of the beta-amyloid protein is inhibited by the cpds. of the invention i.e. ebalactone A or para-amidinophenylmethanesulphonyl fluoride. Inhibition of these activities prevent complex formation between the beta-amyloid protein and alpha(1)-antichymotrypsin, thus can be used to treat, study or diagnose
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Beta A4 peptide; alzheimer's therapy; inhibitor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Inhibiting enzymatic activity of Alzheimer amyloid beta-protein - using premidino:phenyl:methanesulphonyl fluoride or ebelactone A, for treatment, study and diagnosis of Alzheimer's disease, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-APR-1996
                              Determn.
                                                                                 WPI; 1997-165447/15
                                                                                                                                                                                                                                                 16-AUG-1995;
                                                                                                                                                                                                                                                                                                    23-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                            27-FEB-1997.
                                                                                                                                                                                                                                                                                                                                                                                                            WO9707403-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Beta A4 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW12828;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure;
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stermn. of the degree used to screen cpds.
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1 Similarity 97.6%;
41; Conservative
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                                                                                                                                                                                            HOECHST MARION ROUSSEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard;
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                                                                                                                                       Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        s or Down's diseases or PF field.)
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92US-00819361.
93WO-US000325.
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                                                                                                                                       Riedel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
of betaA4 peptide aggregation using binding agent for possible use in Alzheimer's disease treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           disease; peptide aggregation; brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 210; DB 2;
Pred. No. 6.1e-22;
0; Mismatches 1
                                                                                                                                                                                            INC.
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                                                                                                                                       Sahasrabudhe
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                                                                                                                                       SR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
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                                                                             Matches
                                                                                           Query Match
Best Local &
                                                                                                                                                                                       This sequence represents the beta A4 peptide. The degree of aggregation of this peptide is determined using the method of the invention. The beta A4 peptide is present in the brain of Alzheimer's disease patients, but not in the brain of non-Alzheimer's disease patients, but not in the brain of non-Alzheimer's disease patients, where it may be responsible for the destruction of normal brain cells. Once the clumps or aggregates form, the formulation is almost irreversible. The method of the invention comprises reacting this sequence with a binding reagent capable of binding to it only in its non-aggregated state, to form an amount of a beta A4 peptide-bound reagent and an amount of protein free reagent. The amount of the beta A4 peptide binding reagent complex is then measured. Compounds which inhibit aggregation of beta A4 peptide are potentially useful for treatment of Alzheimer's disease
                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 10; 18pp; English.
                                                                          41;
                           1 DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
                                                                                             Similarity
                                                                                                                                                          <u>4</u>2
                                                                                                                                                          A
A
                                                                             Conservative
                                                                                             96.3%;
                                                                          0
                                                                          Score 210; DB
Pred. No. 6.1e-
0; Mismatches
                                                                                                 22;
                                                                                                              Length 42;
                                                                               Indels
                                                                               0,
                                                                             Gaps
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RESULT 8
AAW64507
ID AAW6
  AAW64507 standard; peptide;
                                                            \vdash
                                                            DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA
  42
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Neurotoxic beta-amyloid peptide decoy peptide AAW64507; 20-OCT-1998 (first entry) #20.

Beta-amyloid peptide; aggregate; Alzheimers aggregate; beta-AP; disease; neuropeptide; neurotoxin; calcium influx; decoy; treatment.

Synthetic WO9830229-A1

10-JAN-1997; 29-OCT-1997; 97US-0035847P 97US-00960188

09-JAN-1998;

98WO-US000653

16-JUL-1998.

(MASI) MASSACHUSETTS INST TECHNOLOGY

Ingram ₹ Blanchard 뮙

WPI; 1998-398795/34

Inhibition of aggregation of, e.g. beta-amyloid peptide - by administering decoy peptide or other calcium-influx inhibitor, for, e.g. treating Alzheimer's disease. useful

Example 8; Page 46; 68pp; English

AAW64488-W64517 are decoy peptides that bind to a neurotoxic beta-amyloid peptide (beta-AP) and reduces the ability of beta-AP's to form aggregates that increase calcium influx into neuronal cells. Such peptides can be used in the treatment of diseases associated with neurotoxic aggregates of beta-AP specifically Alzheimer's disease. The peptides are administered at 0.001-1000 (especially 0.2-20) mg/kg, by injection and မ္ပ

Sequence 42 AA;

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RESULT 9
AAW42989
ID AAW4
XX AAW4
XX AAW4
XX AAW4
XX AAW4
XX Beta
KW Cere
KW AMY1
KW AMY1
KW AMY1
KW AMY1
PF 05-3
XX AAW4
XX AAW4
XX Beta
KW Cere
KW AMY1
AW A
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                                                                                                               Query Match
Best Local S
Matches 41
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Best Local (
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                                                                                                                                                                                                                                                                            The present sequence represents a beta-amyloid peptide (BAP). Abnormal accumulation of extracellular BAP in plaques and cerebrovascular deposits is characteristic in brains of individuals suffering from Alzheimers disease and Downs syndrome. BAP is a poorly soluble, self-aggregating protein which is derived from a larger amyloid precursor protein (APP). APP is expressed as an integral membrane protein, and is cleaved by secretase, between BAP 16Lys and 17Leu. Cleavage at this site precludes amyloidogenesis and results in the release of the amino-terminal APP fragment. Three major isoforms of APP exist: APP-695, APP-751 and APP-70. These isoforms are derived by alternative splicing. APP-ARP 751 is a deletion construct of APP-751, which has a deletion of 276 amino acids to within 15 amino acids of the BAP domain. APP can be used as a substrate for studying abnormal proteolytic cleavage which results in the release of BAP, and also to screen for drugs that will inhibit such cleavage
                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-MAY-1992;
20-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Amyloid precursor protein fusion polypeptides - comprising APP fragment and marker, useful for research and drug screening.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Beta-amyloid peptide; BAP; extracellular BAP plaque; cerebrovascular deposit; Alzheimers disease; Downs syndrome; amyloid precursor protein; APP; secretase; BAP aggregation; abnormal proteolytic cleavage.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Col 7; 84pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jacobsen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Full length beta-amyloid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (AMCY ) AMERICAN CYANAMID
                                                                                                                  41;
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                                                                                                                                             Similarity
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                                                                                                                                                                                                                                  42
                              DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
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                                                                                                                                                                                                                                  B
                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vitek MP;
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93US-00123659.
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                                                                                                                                       96.3%;
97.6%;
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97.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      peptide
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                                                                                                            Score 210; DB 2; Length 42; Pred. No. 6.1e-22; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 210; DB 2;
Pred. No. 6.1e-22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BAP).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                            0.
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                                                                                                         Gaps
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                                                                                                            0,
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RESULT 10
AAW47230
ID AAW47
XX AAW47
XX AAW47
XX AAW47
XX AAW47
XX Beta-
XX Scree
XW Alzhe
XX Homo
XX 
RESULT 11
AAY49691
ID AAY49
XX AAY49
XX AAY49
XX I3-JA
XX Human
XX Human
XX Alpha
XW Downs
XX Downs
XX Downs
XX MO995
XX
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence was used in the development of a novel in vitro screening assay for agents capable of affecting the deposition of beta-amyloid peptide (BAP) on tissue. The method comprises contacting a silk sample with labelled BAP, optionally in the presence of a test agent, detecting the amount of label bound to the silk and assessing the effect of the agent on the deposition of BAP. Agents that inhibit binding of BAP to silk are potentially useful for treating amyloidosis diseases, especially Alzheimer's disease
                                                                                                                                                          Human; beta amyloid precursor alpha secretase; neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MINU )
                                                                                Homo sapiens
                                                                                                                                                                                                                                          Human beta amyloid precursor protein peptide
                                                                                                                                                                                                                                                                                                   13-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                             AAY49691 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New in vitro screening assay for Alzheimer's disease drugs - comprises assessing binding of labelled beta-amyloid peptide to silk sample.
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Alzheimer's disease.
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                                                                                                                                                                                                                                                                                                                                                         AAY49691;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-SEP-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-MAY-1998
                                                                                                                                      syndrome;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HARVARD COLLEGE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Maggio JE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96.3%;
nilarity 97.6%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-30; 36pp; English.
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                                                                                                                                                                                                                                                                                                   (first
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                                                                                                                                      mutation
                                                                                                                                                                                                                                                                                                   entry)
                                                                                                                                                                                                                                                                                                                                                                                                                42
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 210; DB 2;
Pred. No. 6.1e-22;
0; Mismatches 1
                                                                                                                                                             protein; APP; beta secretase inhibition;
disorder; Alzheimer's disease;
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WO9951752-A1

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RESULT 12
AAW99585
XX AAW99585
XX AAW99585
XX AAW99585
XX AAW995X
XX AGGE
XX A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes a cell line which produces beta amyloid precursor protein (APP) and expresses alpha secretase activity but expresses beta secretase activity only under an external stimulus. Also described is a cloning method for DNA encoding beta secretase, comprising: (1) inserting a DNA library into the cell line, expressing the inserted DNA, and selecting cells expressing beta secretase then isolating the beta secretase DNA from them, or (2) isolating nucleic acid from the cell line with or without external stimulation and performing subtractive cloning to identify DNA expressed only under stimulation. Products from the present invention may be used in the investigation of neurological disorders such as Alzheimer's disease and Downs syndrome and in particular the association of mutations of the beta APP with them. The present sequence represents a human beta APP peptide
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                                                         WPI; 1999-190112/16.
                                                                                                             Glabe C,
                                                                                                                                                                                                                        14-AUG-1997;
                                                                                                                                                                                                                                                                              13-AUG-1998;
                                                                                                                                                                                                                                                                                                                                     25-FEB-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diagnosis; Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mutant aggregating amyloid-beta peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-JUN-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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                                                                                                                                                                                                                                                                                                                                                                                            WO9908695-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aggregation;
                                                                                                                                                                    (REGC ) UNIV
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fluorescent labeled amyloid A-beta peptides.
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                                                                                                          Garzon-Rodriguez
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                       CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amyloid-beta peptide; fluorescent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                           97US-0055660P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disease
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 210; DB Pred. No. 6.1e. 0; Mismatches
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.. No. 6.1e-22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        group; detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 42;
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RESULT 13
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Best Local
                           as research tools for studying neurotoxicity resulting from Abeta peptide enhanced free-radical production. The treatment increases the activity of the synthetic Abeta peptides in tests to determine free-radical generating capacity and glutamine synthetase inactivation
                                                                                   peptides. The invention provides a process for treating a synthetic Abeta peptide that comprises dissolving the peptide in a deoxygenated solvent selected from trifluoroethanol, hexafluorocyclohexane, dimethyl sulphoxide, morpholinopropanesulphonic acid, dimethylformamide and acetonitrile to a concentration of 0.01-10 mg/ml, incubating the solution at 20-65 deg. C for 0.5-4 hour, and removing the solvent by 'evaporative deposition' in 5-10 minutes. Synthetic amyloid beta peptides are useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This sequence corresponds to a mutant aggregating amyloid-beta peptide which can be covalently labelled with a fluorescent group. The detection or monitoring of an amyloid aggregath a sample can be used to diagnose or detect a predisposition to Alzheimer's disease. The screening assays can be used to identify compounds for the treatment or amelioration of Alzheimer's disease or its symptoms. The fluorescent derivatives of the amyloid-beta peptide are also useful for exploring other aspects of
Sequence
                                                                                                                                                                                                  Sequences AAW81466 to AAW81476 represent synthetic amyloid beta (Abeta)
                                                                                                                                                                                                                                Claim 5; Col 11-12; 14pp; English.
                                                                                                                                                                                                                                                                               Process
                                                                                                                                                                                                                                                                                                            WPI; 1999-034120/03.
                                                                                                                                                                                                                                                                                                                                          Aksenov M,
                                                                                                                                                                                                                                                                                                                                                                                                      29-FEB-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Amyloid beta; Abeta; deoxygenated solvent; evaporative deposition; research; neurotoxicity; free-radical; glutamine synthetase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic amyloid beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-JAN-1999
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                                                                                                                                                                                                                                                             for treating synthetic
nt, useful for studying
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42
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
                                                                                                                                                                                                                                                                                                                                         Carney JM,
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97.6%;
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Pred. No. 6.1e-22;
                                                                                                                                                                                                                                                             amyloid beta peptides -
neurotoxicity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      peptide 9 (residues 1-42).
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                                                                                                                                                                                                                                                                             by organic solvent
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Query Match

96.3%;

Score 210;

DB 2;

Length

42

97.6%;

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Indels

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                                                                                                                                                              This invention describes novel transgenic mice expressing proteins crelated to the pathology of Alzheimer's disease and which provide models for studying potentially therapeutic compounds. The transgenic mice contain a DNA sequence encoding a beta-amyloid precursor protein (App) and a nerve tissue specific promoter operably linked to the beta-App allowing its expression to form beta-amyloid protein deposits in the callowing its expression to form beta-amyloid protein deposits in the molecular mechanisms involved in the synthesis of and, more importantly, inhibiting the synthesis and deposition of beta-amyloid proteins (most importantly in the brain where plaque formation is associated with Alzheimer's disease) by inhibiting production and/or increasing cleavage after production. The transgenic animals provide useful models for studying the in vivo relationships of the proteins to each other and to other and to other compounds being tested for their usefulness in treating Alzheimer's
                                                               Matches
                                                                          Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-JUN-1990;
17-JUN-1991;
21-OCT-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Transgenic mice useful for studying compounds potentially useful in treatment of Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APP; beta-amyloid precursor protein; human; transgenic mice; pathology; Alzheimer's disease; model; therapeutic compound; brain; mechanism; nerve tissue specific promoter; synthesis; inhibitor; deposition;
                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cordell
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human beta-amyloid precursor core protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-APR-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      formation; treatment; A42
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                 DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
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DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
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                                                                                                                                                                                                                                                                                                                                                                                                      Fig 3; 72pp; English.
                                                             Conservative
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91US-00716725.
94US-00327381.
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                                                                          96.3%;
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                                                          Score 210; DB 2;
Pred. No. 6.1e-22;
0; Mismatches 1
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                                                                                       Length 42;
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                                                                                                                                                                     Alzheimer's
                                                          Gaps
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Best Local S
Matches 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New conjugates are disclosed which are of formula A-Z, in which: A is (1) a cyclosporin A analogue described in AAW29987 or (2) an FK506 binding peptide inhibitor; and Z is a polypeptide comprising 5 or more contiguous residues of A-beta peptide. The compounds are novel chemical inducers of dimerization which are non-immunosuppressive and which are inhibitors of A-beta peptide aggregation and deposition in amyloid plaques. The adverse consequences of amyloid plaque formation can be prevented or ameliorated by sequestering the A-beta peptide in monomeric form with a conjugate which links the A-beta peptide in monomeric form with a conjugate which links the A-beta poptide in monomeric form with a conjugate formation and deposition. The compounds can be used for the treatment of formation and deposition. The compounds can be used for the treatment of a confidence with the compounds can be used for the treatment of a confidence with the compounds can be used for the treatment of a confidence with the compounds can be used for the treatment of a confidence with the compounds can be used for the treatment of a confidence with the compounds can be used for the treatment of a confidence with the compounds can be used for the treatment of a confidence with the compounds can be used for the treatment of a confidence with the compounds can be used for the treatment of a confidence with the compounds can be used for the treatment of a confidence with the confidence with the
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                                                                                                                                                                                                                                                                                                                                                                     Sequence 42 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alzheimer's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 5; Page 98; 129pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New A \sim b \sim b inding peptide conjugates and CsA analogs - useful in treatment of neurological diseases e.g. Alzheimer's disease, Multiple Sclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-276928/23
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                                                                                                                                                                                         41;
                                                                                                                                                                                                                               Similarity
                                                         DAEFRHDSGYEVHHQKLVFFAGDVGSNKGAIIGLMVGGVVIA 42
DAEFRHDSGYEVHHOKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
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                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                                               96.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               multiple sclerosis and amyotrophic lateral sclerosis
                                                                                                                                                                                     ,.
                                                                                                                                                                                                                               Score 210; DB 2;
Pred. No. 6.1e-22;
                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                          Length 42;
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